JOINT CANADA-UNITED STATES
NATIONAL STANDARD

ANSI/CAN/UL 2272:2024

STANDARD FOR SAFETY

Electrical Systems for Personal E-Mobility Devices

Approved American National Standard

ANSI/UL 2272-2024

SCC FOREWORD

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UL Standard for Safety for Electrical Systems for Personal E-Mobility Devices, ANSI/CAN/UL 2272

Second Edition, Dated April 19, 2024

Summary of Topics

This new Second Edition ANSI/CAN/UL 2272 dated April 19, 2024 includes the following new and/or revised requirements:

– Updated battery pack compartment requirements; 9.2.3

– Added more specific evaluation requirements of gaskets and seals; 5.2, 7.7,

– Clarified flammability requirements for nonmetallic materials; 7.8 – 7.13

– Updated charger requirements; 11.2, Section 36

– Added external output terminal marking requirement; 5.2, Markings, 47.5, Annex B

– Updated temperature requirements; 6.23, 6.24, 27.3, 27.5

– Added reference to UL 2054, UL 62133-1 / CSA C22.2 No. 62133-1, UL 62133-2 and UL 62133-2 / CSA C22.2 No. 62133-2 for rechargeable batteries providing power other than drivetrain unit; 5.2, 17.9, 17.10

– Revised post-test cycle for non-operational condition; 22.1

– Revised the Vibration Test; 5.2, 34.1 – 34.3

– Revised the Partial Immersion test to allow the DUT to drain after the test; 44.2.2

– Clarified the definition in 6.25 to exclude motorized wheelchairs including mobility scooters for medical purposes.

– Updated the Component Section and Annex A; Section 2

– Updated the component cell requirements; 5.2, 17.1, 17.2, 17.4, 17.7, 17.8

– Added UL 62368-1 as the alternative electrical spacing requirement; 14.2, 31.4

– Aligned the dielectric strength test condition; 30.2

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated November 3, 2023 and February 23, 2024.

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ANSI/UL 2272-2024

APRIL 19, 2024

ANSI/CAN/UL 2272:2024

Standard for Electrical Systems for Personal E-Mobility Devices

First Edition – November, 2016

Second Edition

April 19, 2024

This ANSI/CAN/UL Safety Standard consists of the Second Edition.

The most recent designation of ANSI/UL 2272 as an American National Standard (ANSI) occurred on April 19, 2024. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page, Preface or SCC Foreword.

This standard has been designated as a National Standard of Canada (NSC) on April 19, 2024.

No Text on This Page

CONTENTS

Preface (UL)

This is the Second Edition of the ANSI/CAN/UL 2272, Standard for Electrical Systems for Personal E-Mobility Devices.

ULSE is accredited by the American National Standards Institute (ANSI) and the Standards Council of Canada (SCC) as a Standards Development Organization (SDO).

This Standard has been developed in compliance with the requirements of ANSI and SCC for accreditation of a Standards Development Organization.

This ANSI/CAN/UL 2272 Standard is under continuous maintenance, whereby each revision is approved in compliance with the requirements of ANSI and SCC for accreditation of a Standards Development Organization. In the event that no revisions are issued for a period of four years from the date of publication, action to revise, reaffirm, or withdraw the standard shall be initiated.

In Canada, there are two official languages, English and French. All safety warnings must be in French and English. Attention is drawn to the possibility that some Canadian authorities may require additional markings and/or installation instructions to be in both official languages.

Comments or proposals for revisions on any part of the Standard may be submitted at any time. Proposals should be submitted via a Proposal Request in the Collaborative Standards Development System (CSDS) at https://csds.ul.com.

This Edition of the Standard has been formally approved by the Technical Committee (TC) on Electrical Systems for Personal E-Mobility Devices, TC 2272.

This list represents the TC 2272 membership when the final text in this Standard was balloted. Since that time, changes in the membership may have occurred.

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TC 2272 Membership Continued

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This Standard is intended to be used for conformity assessment.

The intended primary application of this Standard is stated in its scope. It is important to note that it remains the responsibility of the user of the standard to judge its suitability for this particular application.

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